

SEQUENCE LISTING

<110> E.I. duPont de Nemours and Company, Inc.  
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Tao, Luan  
Sedkova, Natalia

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<151> 2003-05-07

<150> US 60/527,083  
<151> 2003-12-03

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Arg Val Ile His Asp Leu Ala Ser Thr Thr Asp Met Leu Cys Arg Glu  
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Gln Met Glu Ala Ala Gly Gly Leu Val Ala Glu Ala Leu Gln Leu Pro  
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Gln Arg Tyr Gln Ala Ser Ser Asp Ile Tyr Asp Arg Ile Met Arg Arg  
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Leu Val Pro Ala Phe Asp Phe Pro Arg Gln Gln Leu Pro Ala Cys Tyr  
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His Ser Val Gly Pro Leu Arg Thr Pro Val Ala Ser Gly Ala Leu Ala  
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Ala Pro Trp Pro Ala Leu Arg Gln Pro Val Val Tyr Ala Ser Leu Gly  
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Ile Thr His Ala Gly Leu Asn Ser Ala Leu Glu Ala Leu Glu Cys Gly  
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Phe His Arg Glu Asp Val Ser Glu Ala Gln Phe Arg Trp Leu Glu Pro		
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Leu Leu Ser Ala Arg Trp Pro Gly Tyr Gln Val Arg Phe Pro Thr Leu			
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Arg Arg Gln Leu Asp Gly Glu Tyr Cys Ser Ile Ala Ser Glu Asp Phe		
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Ala Arg His Leu Gln Gln Val Leu Gly Ala Ala Leu Arg Thr Ala Ala		
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Pro Val Ser Glu Val Ser Pro Thr Gly Val Arg Leu Ala Asp Gly Gly		
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Met Leu Gln Ala Gln Ala Val Ile Asp Gly Arg Gly Leu Gln Pro Thr		
130	135	140

Pro His Leu Gln Leu Gly Tyr Gln Ala Phe Val Gly Gln Glu Trp Gln			
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Leu Ala Ala Pro His Gly Leu Gln Gln Pro Ile Leu Met Asp Ala Ser		
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Val Asp Gln Gln Gln Gly Tyr Arg Phe Val Tyr Thr Leu Pro Leu Ser		
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Ala Ser Arg Leu Leu Ile Glu Asp Thr His Tyr Ile Asn His Ala Thr		
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Arg Gly Trp Asn Leu Arg Gln Leu Leu Arg Glu Glu His Gly Ser Leu  
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Pro Ile Thr Leu Ser Gly Asp Ile Asp Gln Phe Trp Gln Gln Gln His  
245 250 255

Gly Gln Pro Cys Ser Gly Leu Arg Ala Gly Leu Phe His Ala Thr Thr  
260 265 270

Gly Tyr Ser Leu Pro Ala Ala Val Ala Leu Ala Glu Lys Ile Ala Ser  
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Thr Leu Pro Ala Asp Ala His Thr Leu Ser His Cys Ile Glu Ser Phe  
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Ala Arg Gln His Trp Arg Glu Gln Arg Phe Phe Arg Leu Leu Asn Arg  
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Met Leu Phe Leu Ala Gly Arg Pro Glu Gln Arg Trp Arg Val Met Gln  
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Arg Phe Tyr Arg Leu Asp Ala Gly Leu Ile Ser Arg Phe Tyr Ala Gly  
340 345 350

Gln Leu Arg Leu Ser Asp Lys Ala Arg Ile Leu Cys Gly Lys Pro Pro  
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<213> *Pectobacterium cypripedii* DC416

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 35 40 45

Thr Phe Asp Ala Gly Pro Thr Val Ile Thr Asp Pro Ser Ala Ile Glu  
 50 55 60

Ala Leu Phe Thr Leu Ala Gly Lys Gln Leu Ser Asp Tyr Val Asp Leu  
 65 70 75 80

Met Pro Val Thr Pro Phe Tyr Arg Leu Cys Trp Glu Asp Gly Arg Gln  
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Leu Asp Tyr Asp Asn Asn Gln Ala Gln Leu Glu Gln Gln Ile Ala Thr  
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Gln Ala Trp Arg Ser Val Tyr Ser Met Val Ala Lys Phe Ile His Asp  
165                    170                    175

Asp His Leu Arg Gln Ala Phe Ser Phe His Ser Leu Leu Val Gly Gly  
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Asn Pro Phe Ala Thr Ser Ser Ile Tyr Thr Leu Ile His Ala Leu Glu  
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Asp Gly Met Ala Arg Leu Phe Arg Asp Leu Gly Gly Glu Leu Leu Leu  
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Asn Ala Asp Val Val His Thr Tyr Asp Arg Leu Leu Ser Gln His Pro  
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Ala Ala Arg Lys Arg Ala Ala Thr Leu Lys Arg Lys Arg Met Ser Asn  
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Ser Leu Phe Val Leu Tyr Phe Gly Leu Asn His Ala His Pro Gln Leu  
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Leu Glu Glu His Tyr Met Pro Gly Leu Arg Gln Gln Leu Val Thr His  
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Arg Met Phe Thr Pro Phe Asp Phe Arg Asp Thr Leu His Ala His Gln  
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Gly Ser Ala Phe Ser Leu Glu Pro Ile Leu Thr Gln Ser Ala Trp Phe  
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Arg Pro His Asn Arg Asp Ala Asp Ile Thr Asn Leu Tyr Leu Val Gly  
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Met Met Ala Arg Val Met Gly Val Arg Asp Glu Arg Val Leu Asp His  
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